

Fibronectin-Binding Protein
Synthetic Peptide
Catalog # SP3619a**Specification**

Fibronectin-Binding Protein - Product Information

Primary Accession	P14738
Other Accession	Q2FE03 , Q5HD51
Sequence	NH2-FNKHTEIIIEEDTNKDKPSYQFGGHNSVDF EEDTLPKV-COOH

Fibronectin-Binding Protein - Additional Information**Gene ID** 3921457**Other Names**

Fibronectin-binding protein A, fnbA

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Fibronectin-Binding Protein - Protein Information**Name** fnbA**Function**

Possesses multiple, substituting fibronectin (Fn) binding regions, each capable of conferring adherence to both soluble and immobilized forms of Fn. This confers to *S.aureus* the ability to invade endothelial cells both in vivo and in vitro, without requiring additional factors, although in a slow and inefficient way through actin rearrangements in host cells. This invasion process is mediated by integrin alpha-5/beta-1. Promotes bacterial attachment to both soluble and immobilized forms of fibrinogen (Fg) by means of a unique binding site localized within the 17 C-terminal residues of the gamma- chain of human Fg. Both plasma proteins (Fn and Fg) function as a bridge between bacterium and host cell. Promotes attachment to immobilized elastin peptides in a dose-dependent and saturable manner. Promotes attachment to both full-length and segments of immobilized human tropoelastin at multiple sites in a dose and pH-dependent manner. Promotes adherence to and aggregation of activated platelets independently of other *S.aureus* surface molecules. Is a critical mediator implicated in the induction of experimental endocarditis in rats with catheter-induced aortic vegetations, promoting both colonization and persistence of the bacterium into the host.

Cellular Location

Secreted, cell wall {ECO:0000255|PROSITE- ProRule:PRU00477, ECO:0000305|PubMed:11830639}; Peptidoglycan-anchor {ECO:0000255|PROSITE-ProRule:PRU00477, ECO:0000305|PubMed:11830639, ECO:0000305|PubMed:14769030}. Note=Anchored to the cell wall by sortase A.

Fibronectin-Binding Protein - Images